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MAT1A Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12704a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q00266
Other Accession	P13444, Q91X83, Q2KJC6, NP_000420.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32086
Calculated MW	43648
Antigen Region	107-136

Additional Information

Gene ID	4143
Other Names	S-adenosylmethionine synthase isoform type-1, AdoMet synthase 1, Methionine adenosyltransferase 1, MAT 1, Methionine adenosyltransferase I/III, MAT-I/III, MAT1A, AMS1, MATA1
Target/Specificity	This MAT1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 107-136 amino acids from the N-terminal region of human MAT1A.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MAT1A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MAT1A
Synonyms	AMS1, MATA1

Function	Catalyzes the formation of S-adenosylmethionine from methionine and ATP. The reaction comprises two steps that are both catalyzed by the same enzyme: formation of S-adenosylmethionine (AdoMet) and triphosphate, and subsequent hydrolysis of the triphosphate.
Tissue Location	Expressed in liver..

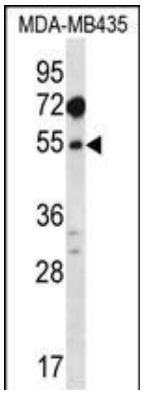
Background

This gene catalyzes a two-step reaction that involves the transfer of the adenosyl moiety of ATP to methionine to form S-adenosylmethionine and tripolyphosphate, which is subsequently cleaved to PPi and Pi. S-adenosylmethionine is the source of methyl groups for most biological methylations. The encoded protein is found as a homotetramer (MAT I) or a homodimer (MAT III) whereas a third form, MAT II (gamma), is encoded by the MAT2A gene. Mutations in this gene are associated with methionine adenosyltransferase deficiency.

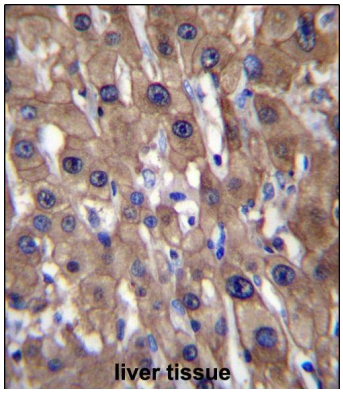
References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Wu, S.M., et al. Cell. Mol. Life Sci. 67(11):1831-1843(2010)
Lai, C.Q., et al. Am. J. Clin. Nutr. 91(5):1377-1386(2010)
Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :

Images



MAT1A Antibody (N-term) (Cat. #AP12704a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the MAT1A antibody detected the MAT1A protein (arrow).



MAT1A Antibody (N-term) (Cat. #AP12704a)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of MAT1A Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Glucocorticoid-induced S-adenosylmethionine Enhances the IFN Signaling Pathway by Restoring STAT1 Methylation in

Hepatitis B Virus Infected Cells.
- Hepatic metabolite profiles in mice with a suboptimal selenium status.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.